



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,014	09/11/2003	Kia Silverbrook	BAL42US	3023
24011	7590	12/23/2004	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, 2041 AUSTRALIA			BROOKE, MICHAEL S	
			ART UNIT	PAPER NUMBER
				2853

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/659,014	SILVERBROOK, KIA	
	Examiner	Art Unit	
	Michael S. Brooke	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-14 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11 September 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 09/113,053.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09/11/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-7, 9, 10, 15, 16 and 22-25 of U.S. Patent No. 6,702,417. Although the conflicting claims are not identical, they are not patentably distinct.

With respect to claims 1 and 2 of the application, claim 2 of '417 teaches a method of determining a media colorant of a printing cartridge-which is a characteristic of a printing cartridge-, the method comprising the step of actuating a number of capacitive sensors within an array of such sensors with an actuating formation positioned on the printing cartridge, the actuating formation representing data relating to a media colorant in the cartridge, so that the

capacitive sensors, when actuated, generate a signal carrying data relating to the media colorant.

With respect to claim 3 of the application, claims 2-4 of '417 teach that the data represented by the actuating information relates to at least one of: a serial number identifying the media colorant, a type of the media colorant, a viscosity of the media colorant, a surface tension of the media colorant, optical characteristics of the media colorant and an optimal ink drop volume corresponding to a type of media.

With respect to claim 4 of the application, claims 1, 2 and 9 of '417 teach that the characteristic of the printing cartridge relates to a media of the cartridge.

With respect to claim 5 of the application, claims 1, 2, 9 and 10 of '417 teach that the data represented by the actuating formation relates to at least one of: a serial number identifying the media, a type of the media and a length of the media.

With respect to claim 6 of the application, claims 1, 2 and 15 of '417 teach that the characteristic of the printing cartridge relates to a media and a media colorant.

With respect to claim 7 of the application, claims 1, 2, 15 and 16 of '417 teach that the data represented by the actuating formation relates to at least one of: a serial number identifying the media, a serial number identifying the media colorant, a length of the media, a type of the media, a viscosity of the media colorant, a surface tension of the media colorant, optical characteristics of the

media colorant and an optimal ink drop volume of the media colorant corresponding to the type of media.

With respect to claim 8 of the application, claims 2, 3 and 5 of '417 teach that a conductive material defines the actuating formation so that the actuating formation and a capacitive plate of each of said number of capacitive sensors define a capacitor.

With respect to claim 9 of the application, claims 2, 3 5 and 6 of '417 teach that the actuating formation is defined by a plurality of projections that extend from the housing in an array which represents the data, each projection corresponding with a capacitive plate of each capacitive sensor of said number of capacitive sensors.

With respect to claim 10, of the application, claims 2, 3 and 7 of '417 teach that the actuating formation is the product of an injection micromolding process.

With respect to claim 11, of the application, claims 2 and 22 of '417 teach that the array of capacitive sensors is CMOS devices.

With respect to claim 12, of the application, claims 2 and 23 of '417 teach that the array of capacitive sensors includes a substrate having dielectric properties, the substrate defining a contact surface against which the actuating formation bears, with each capacitive sensor including a capacitor plate positioned in the substrate, and spaced from the contact surface, so that, when the actuating formation bears against the contact surface, the capacitor plate and the actuating formation defines a capacitor.

With respect to claim 13 of the application, claims 2, 23 and 24 of '417 teach that the capacitor plates are positioned so that capacitor plates of predetermined combinations of capacitor plates correspond with projections of the actuating formation, to define capacitors having a capacitance that represents the data relating to the media colorant.

With respect to claim 14 of the application, claims 2, 23 and 25 of '417 teach that the array of capacitive sensors incorporates circuitry to determine the capacitance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. Brooke whose telephone number is 571 272-2142. The examiner can normally be reached on M-F 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2853

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael S. Brooke
Primary Examiner
Art Unit 2853

MSB
12/20/04